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AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Currently Amended) A system for applying a marking to an optical media disk substrate, the system comprising: a first unit for applying a coating composition—comprising at least one photocurable photoinduced color forming composition photosensitive material to form a coating over at least one data readout area on a data readout side of the optical media disk substrate; a second unit comprising a first ultraviolet (UV) light source for exposing the coating to wavelengths of UV light wherein the wavelengths of UV light cure the coating upon the at least one readout area; a third unit for creating an image of the marking; the third unit comprising a second UV light source for exposing at least a portion of the coating to the image for recording the marking into the coating, wherein the wavelengths produced by the first UV light source comprise wavelengths substantially separate from wavelengths of the second UV light source, further comprising an automated a conveyor to transport the optical media disk substrate from the first unit to the second unit and to the third unit in a sequential manner.

- 2. (Cancelled).
- 3. (Original) The system as in claim 1, wherein at least one of the first light source and the second light source comprise a wavelength filter.
- 4. (Original) The system as in claim 3, wherein the wavelength filter comprises a wavelength cutoff filter rated for wavelengths between about 340 nm to about 370 nm.
- 5. (Original) The system as in claim 1, wherein the coating comprises at least one each of a photoinitiator, a photoacid generator and a color former.

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6. (Original) The system as in claim 5, wherein the photoinitiator comprises at least one of: a stable liquid mixture of trimethylbenzoyldiphenylphosphine oxide, .alpha.-hydroxyketones, and benzophenone derivatives; 2-Benzyl-2-dimethylamino-1-(4-morpholinophenyl)-butanone-1; Bis(2,4,6-trimethylbenzoyl)-phenylphosphineoxide; an eutectic liquid mixture of: 2,4,6 trimethylbenzophenone and 4 methylbenzophenone; a mixture of 50% 2,4,6-Trimethylbenzoyl-diphenyl-phosphineoxide and 50% 2-Hydroxy-2-methyl-1-phenyl-propan-1-one; 1-[4-(2-Hydroxyethoxy)-phenyl]-- 2-hydroxy-2-methyl-1-propane-1-one; isopropyl thioxanthone; a liquid mixture of about 70% Oligo [2-hydroxy-2-methyl-1-[4-(1-methylvinyl) phenyl] propanone and about 30% 2-hydroxy-2-methyl-1-phenyl propan-1-one.

7. (Original) The system as in claim 5, wherein the photoacid generator comprises at least one of: bis (4-tert-butylphenyl) iodonium p-toluenesulfonate; (tert-butoxycarbonylmethoxynaphthyl) diphenyl sulfonium triflate; (4-phenoxyphenyl) diphenyl sulfonium triflate; (4-tert-Butylphenyl) diphenyl sulfonium triflate; diphenyliodonium hexafluorophosphate; diphenyliodonium triflate; triphenylsulfonium triflate; 2-methyl-4,6-bis(trichloromethyl)-s-triazine; tris(2,4,6-trichloromethyl)--s-triazine; 2-phenyl-4,6-bis(trichloromethyl)-s-triazine; 2-(4-chlorophenyl)-4,6-bis(trichloromethyl)-s-triazine; (4-methylphenyl)diphenyl sulfonium triflate; and, diphenyl iodonium hexafluorophosphate.

8. (Original) The system as in claim 5, wherein the color former comprises at least one of COPIKEM 16 Red, COPIKEM 6 Green, COPIKEM 34 Black, PERGASCRIPT Red I-6B, BK-305 Black, S-205 Black, BK-400, PERGASCRIPT Orange I-G, PERGASCRIPT Green I-2GN, PERGASCRIPT Blue I-2RN, PERGASCRIPT Black I-2R and Red 520.

9. (Original) The system as in claim 5, wherein the coating further comprises a wetting agent.

10. (Original) The system as in claim 9, wherein the wetting agent comprises at least one of a polyether modified poly-dimethyl-siloxane; a crosslinkable silicone polyether acrylate; and a crosslinkable silicone acrylate.

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11. (Original) The system as in claim 1, wherein the coating comprises a mixture comprising at

least one acrylate.

12. (Original) The system as in claim 11, wherein the acrylate comprises at least one of:

ethoxylated pentaerythritol tetraacrylate; 1,6 hexanediol diacrylate; tetrahydrofurfuryl acrylate;

highly propoxylated (5.5) glyceryl triacrylate; 3 mole propoxylated glyceryl triacrylate; 3 mole

ethoxylated trimethylolpropane triacrylate; tris (2-hydroxy ethyl) isocyanurate triacrylate;

ditrimethylolpropane tetraacrylate; urethane diacrylate oligomer; isobornyl acrylate; a

difunctional bisphenol A based epoxy acrylate; a low viscosity aliphatic diacrylate oligomer; tris

(2-hydroxy ethyl) isocyanurate triacrylate; 2-phenoxyethyl acrylate; a difunctional bisphenol A

based epoxy acrylate blended with 40% 1,6 hexanediol diacrylate; a difunctional bisphenol A

based epoxy acrylate blended with 50%, 2-phenoxyethyl acrylate; and acrylic acid.

13. (Original) The system as in claim 11, wherein the acrylate comprises at least one non-

alkoxylated monomer.

14. (Original) The system as in claim 1, further comprising a unit for applying a photoabsorptive

material to the coating.

15. (Original) The system as in claim 1, wherein the coating comprises at least one of: 2,4-di-tert-

butyl-6-(5-chlorobenzotria zol-2-yl) phenol; 2-(2H-benzotriazol-2-yl)-6-dodecyl-4-methyl-

phenol; a mixture of reaction products of methyl 3-(3-(2H-benzotraizole-2-yl)-5-t-butyl-4-

hydroxyphenyl-) proprionate and PEG 300; branched and linear 2-(2H-benzotriazol-2-yl)-6--

dodecyl-4-methylphenol; 2-(2'hydroxy-5'methacryloxyethylphenyl)-2H-benzotr- iazole; 2,2'-

dihydroxy-4-methoxybenzophenone; 2-Hydroxy-4-n-octoxybenzophe- none; and, octyl

methoxycinnamate.

16. (Original) The system as in claim 1, wherein the system comprises an optical media

replication system.

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17. (Currently Amended) The system as in claim 1, wherein the format of the optical media <u>disk substrates</u> comprises one of DVD 5, DVD 9, DVD 10, DVD 18, DVD-R, DVD-RW, CD-Audio, CD-Video, CD-R, CD-RW, CD-ROM, CD-ROM/XA, CD-i, CD-Extra, CD-Photo, Super-Audio CD, Blu-Ray, Mini-Disc and a hybrid format.

18. (Previously Presented) The system as in claim 1, wherein the first unit comprises at least one spin coating station.

19. (Previously Presented) The system as in claim 1, wherein the third unit comprises a photomask comprising an image of the marking.

20. (Previously Presented) The system as in claim 1, wherein the third unit comprises a direct writing laser for forming an image of the marking.

21. (Previously Presented) The system as in claim 1, wherein the third unit comprises an electronically programmable photomask for forming an image of the marking.

22. (Previously Presented) The system as in claim 1, further comprising a fourth unit comprising an inspection station for inspecting the quality of at least one of the substrate, the coating, the curing of the coating, and the marking in the coating.

23. (Cancelled).

24. (Currently Amended) The system as in claim 1, further comprising a system controller for operating the system, the system controller comprising a computer processor for executing an instruction set.

25. (Original) The system as in claim 1, wherein the marking comprises at least one of: text information, alphanumeric characters, symbols, graphic information, embedded information, a digital watermark and a covert marking.

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26. (Original) The system as in claim 1, wherein the marking comprises at least one of identification information, authentication information, instructional information, advertising, branding, and promotional information.

27. (Currently Amended) A system for applying a color forming coating to a data readout area of an optical media disk substrate, the system comprising: a first unit for applying a color forming coating eomposition—comprising at least one photocurable photoinduced color forming composition photosensitive material to form a color forming coating over the data readout area of on a data readout side the optical media disk substrate, the coating comprising a photocurable component sensitive to a first set of ultraviolet (UV) light wavelengths and a photosensitive color forming component sensitive to a second set of UV light wavelengths substantially separate from the first set of wavelengths; a second unit comprising a first ultraviolet (UV) light source for exposing the coating to the first set of wavelengths of UV light wherein the wavelengths of UV light cure the coating upon the data readout area; a third unit for creating an image of the marking, the third unit comprising a second UV light source with the second set of UV light wavelengths for exposing at least a portion of the coating to the image for recording the marking into the coating, further comprising an automated a conveyor to transport the optical media disk substrate from the first unit to the second unit and to the third unit in a sequential manner.

28. (Currently Amended) A system for marking the readout area of an optical media <u>disk</u> <u>substrate</u>, the system comprising: a station for receiving an optical media <u>disk</u> <u>substrate</u> <u>comprising the optical media disk substrate;</u>, <u>comprising:</u> a first unit for applying a color forming coating <u>composition</u> comprising at least one photosensitive material and at least one photocurable material to form a coating over a data readout area <u>on a data readout side</u> of the optical media <u>disk substrate</u>, the at least one photocurable material of the coating composition being sensitive to a first set of ultraviolet (UV) light wavelengths and the at least one photosensitive color material being sensitive to a second set of UV light wavelengths substantially separate from the first set of UV light wavelengths; a second unit comprising a first ultraviolet (UV) light source for exposing the coating to the first set of wavelengths of UV light wherein the wavelengths of

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UV light cure the coating upon the readout area; a third unit for creating an image of the marking, the third unit comprising a second UV light source with the second set of UV light wavelengths for exposing at least a portion of the coating to the image for recording the marking into the coating, further comprising an automated —a—conveyor to transport the optical media disk substrate from the station for receiving to the first unit to the second unit and to the third unit in a sequential manner.

- 29. (Previously Presented) The system as in claim 28, further comprising a fourth unit for applying an overcoat over the color forming coating.
- 30. (Cancelled).
- 31. (Cancelled).
- 32. (Cancelled).
- 33. (Cancelled).
- 34. (Cancelled).
- 35. (Cancelled).
- 36. (Cancelled).
- 37. (Cancelled).
- 38. (Cancelled).
- 39. (Cancelled).

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40. (Cancelled).

41. (Cancelled).

42. (Cancelled).

43. (Cancelled).

44. (Currently Amended) A system for applying a marking to an optical media disk substrate, the system comprising: a first unit for applying a color forming coating composition comprising at least one photosensitive material and at least one photocurable material to form at least one color forming layer over at least one data readout area on a data readout side of an optical media disk substrate; a second unit comprising a first ultraviolet (UV) light source for exposing the at least one color forming layer to a first band of UV light wavelengths to cure the at least one color forming layer; a third unit comprising a second light source for selectively exposing at least a portion of the at least one color forming layer to a second band of UV light wavelengths for recording the marking into the at least one color forming layer; a fourth unit for applying at least one overcoat layer to the at least one color forming layer; and, a fifth unit comprising a third light source for exposing the at least one overcoat layer to a third band of UV light wavelengths for curing the at least one overcoat layer, wherein the wavelengths produced by the first UV light source comprise wavelengths substantially separate from wavelengths of the second UV light source, further comprising an automated a conveyor to transport the optical media disk substrate from the first unit to the second unit and to the third unit in a sequential manner.

45. (Previously Presented) The system as in claim 44, wherein the at least one overcoat layer comprises at least one of a photoabsorptive material and an acid scavenger.

46. (Original) The system as in claim 44, wherein the at least one overcoat layer exhibits a high degree of optical density at the second band of wavelengths.

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47. (Cancelled).

48. (Currently Amended) A system for applying a marking to an optical media <u>disk substrate</u>, the system comprising:

a preliminary station <u>for forming where the a substrate of an</u> optical media <u>disk substrate</u> <u>comprising the optical disk substrate</u> <u>is formed</u>;

a first unit configured to apply a coating including a photocurable photoinduced color forming composition on the optical media disk substrate and configured for where spincoating the of a color forming composition is performed to create a color forming layer on a data readout side of the optical media disk substrate;

a second unit comprising a first ultraviolet (UV) light source configured to cure which eures the color forming layer through emission of UV light corresponding to a first set of wavelengths;

a third unit comprising a first mask and a second ultraviolet (UV) light source <u>configured</u> to emit that emits UV light through the first mask onto the optical media <u>disk substrate</u> to image a marking of a first color in the color forming layer;

a fourth unit comprising a second mask and a third UV light source <u>configured to emit</u> that emits UV light through the second mask onto the optical media <u>disk substrate</u> to image a marking of a second color in the color forming layer; and

a fifth unit comprising a third mask and a fourth UV light source configured to emit that emits UV light through the third mask onto the optical media disk substrate to image a marking of a third color in the color forming layer.

49. (Currently Amended) A system for applying a marking to an optical media disk substrate according to claim 48, further comprising a finishing station comprising inspection equipment used to inspect the optical media disk substrate for rejection or acceptance, the system being configured to automatically transport wherein the optical media disk substrate is transported through the system via a conveyor, wherein the first UV light source is configured to provide provides UV light of a set of wavelengths that is substantially different from the set of wavelengths of the UV light provided by any of the second, third, and fourth UV light sources.

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50. (Currently Amended) A system for applying a marking to an optical media <u>disk substrate</u> according to claim 49, further comprising a system controller that controls each of the preliminary station, finishing station, and first through fifth units, the controller comprising a computer processor for executing an instruction set.

51. (Canceled).

52. (Currently Amended) A system for applying a marking to an optical media <u>disk substrate</u> according to claim 50, further comprising the color forming composition.

53. (Currently Amended) A system for applying a marking to an optical media <u>disk substrate</u> according to claim 50, further comprising the optical media <u>disk substrate</u> with embossed data.

54. (Currently Amended) The system as in claim 1, further comprising the optical media <u>disk</u> substrate comprising a base layer with embossed data.

55. (Currently Amended) The system as in claim 18, the first unit comprising an optical media disk substrate spinning speed of between about 30 to 100 revolutions per minute (RPM) when coating material is dispensed, an acceleration of up to about 2000 revolutions per second per second (RPSS), and a multi stage spin-up.